

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 3-9 and 11 are pending in the application, with claims 1 and 8 being the independent claims. Claims 3 and 10 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1, 3-9 and 11 have been amended to more clearly define the subject matter of the invention, support for the amendment can be found throughout the specification. Applicants have amended the claims herein to recite the weight ratios recited in canceled claim 10, additional support can also be found in paragraph [0014]. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Election/Restriction Requirement

Applicant thanks the Examiner for withdrawing the Election/Restriction requirement of December 5, 2006. (Office Action, hereinafter "OA", at page 2.)

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1-11 under 35 U.S.C. §102(b) as allegedly being anticipated by Chandran *et al.* (U.S. Pat. No. 6,890,957 B2, hereinafter "the '957 patent"). (OA at pages 2-4.) Specifically, the Examiner asserts the '957 patent teaches using "metformin or salt thereof may be in combination with one or more

antihyperglycemic agents," such as glimepiride. (OA at page 2-3.) The Examiner asserts the '957 patent teaches "that the metformin or salt are preferably employed in a weight ratio to the sulfonyl urea in the range from about 50:1 to about 300:1." (OA at page 3.) The Examiner asserts the '957 patent teaches "that the primary goal in the treatment of diabetes is to maintain blood glucose levels as close to normal as possible." (OA at page 3.) More specifically, the Examiner asserts that "the synergistic control of blood glucose levels is construed to be coextensive with the coadministration of metformin and glimepiride in the absence of evidence to the contrary." (OA at page 4.) Applicant respectfully disagrees with this rejection, and requests that the Examiner reconsider and withdraw the rejection.

The '957 patent does not teach a solid formulation comprising metformin and glimepiride in the relative ratios recited in Applicant's amended claims. To anticipate a claim, the reference must teach every element of the claim. *See MPEP § 2131, citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). The '957 patent is directed to a liquid composition comprising metformin, the purpose of formulating metformin as a liquid is to more easily adjust the treatment dosage of metformin. The present invention is directed to a solid dosage formulation comprising metformin and glimepiride in a synergistic amount. (See paragraphs [0014 and 0073].) The '957 patent does not teach a solid formualtion comprising a 500:2 to 500:1 ratio of metformin to glimepiride that has a greater than additive affect for reducing plasma glucose levels. Additionally, the '957 patent does not describe a specific formulation

comprising metformin to glimepiride at a ratio of 500:1 to 500:2 as recited in claim 1.

As such, Applicant respectfully asserts that the '957 patent does not teach every element recited in any of the presently amended claims, and therefore does not anticipate the present invention.

The '957 patent does not disclose a solid composition comprising metformin and glimepiride having a ratio in the range of 500:2 [250:1] to 500:1. To anticipate a claim to a range, the range must be taught with sufficient specificity. *See* MPEP 2131.03 II., *citing Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 999 (Fed. Cir. 2006) (wherein the court held that a reference temperature range of 100-500 °C did not describe the claimed range of 330-450 °C with sufficient specificity to be anticipatory). The Examiner asserts the '957 patent "teach that the metformin or salt are preferably employed in a weight ratio to the sulfonyl urea in the range from about 50:1 to about 300:1." (OA at page 3) The preferred combination of metformin to sulfonylurea in the '957 patent is in the range of 75:1 to 250:1. However, not all metformin/sulfonylurea combinations exhibit a synergistic effect. For example, a combination of metformin with glyburide, a sulfonylurea, at a ratio of 75:1 does not result in a synergistic lowering of blood glucose level in a diabetic patient. (*See* U.S. Pat. Appl. No. 6,011,049 B2, Form PTO-892 of December 5, 2006, col. 16, lines 21-35.) Here, Applicants have established that the claimed formulations of metformin and glimepiride in a range of 500:2 to 500:1 have a synergistic effect on reducing blood glucose levels in a diabetic patient. (*See* specification paragraphs [0012 and 0014].) The efficacy of the combination is greater than the additive effect of each individual component. (*See* specification paragraph [0012].) Thus, the effect of using the presently claimed formulation in the claimed ratios

is unexpected. Furthermore, all combinations of metformin and glimepiride described in the '957 do not exhibit a synergistic effect, thus, Applicant respectfully asserts that the '957 patent does not teach a range of ratios with sufficient specificity to achieve synergism. Applicant respectfully requests reconsideration and withdrawal of this rejection.

A generic composition comprising metformin and a sulfonylurea does not provide any insight that the claimed combination is synergistic. Inherency may not be established by probabilities or possibilities. *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) "An invitation to investigate is not an inherent disclosure" where a prior art reference "discloses no more than a broad genus of potential applications of its discoveries." *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1367, (Fed. Cir. 2004) The Examiner asserts that "the synergistic control of blood glucose levels is construed to be coextensive with the coadministration of metformin and glimepiride in the absence of evidence to the contrary." (OA at page 4.) Contrary to the Examiners assertion, the mere co-administering of metformin and glimepiride, a sulfonylurea, is not necessarily synergistic because not all metformin/sulfonylurea combinations exhibit a synergistic effect. For example, a combination of metformin with glyburide, a sulfonylurea, at a ratio of 75:1 does not result in a synergistic lowering of the blood glucose level in a diabetic patient. (See U.S. Pat. Appl. No. 6,011,049 B2, col. 16, lines 21-35.) Thus, the suggested formulation of metformin with a sulfonylurea in the range from about 50:1 to about 300:1 as suggested by the '957 patent does not produce a synergistic effect as required by the presently claimed invention. Here, Applicant has discovered that the claimed ratio of metformin and glimepiride in a solid

formulation does not result in hypoglycemia in the diabetic patient, and that the formulation can be used to safely lower blood glucose levels to treat type-2 diabetes. (*See* specification paragraph [0012].) Applicant respectfully asserts that the '957 patent does not teach the range of ratio from 500:2 to 500:1 or the solid formulations as presently claimed. Therefore, the '957 patent does not inherently or otherwise describe the present invention and thereby cannot anticipate the present invention. Applicant respectfully requests reconsideration and withdrawal of this rejection as it applies to the presently pending claims.

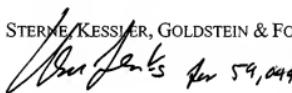
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE KESSLER, GOLDSTEIN & FOX P.L.L.C.


Vincent L. Capuano
Attorney for Applicant
Registration No. 42,385

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600
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